

ALUTECH SYSTEMS S.R.O. COMPUTER SIMULATION REPORT

SCOPE OF WORK

SL130 SLIDING DOOR - NFRC 100/200/500

REPORT NUMBER

R2648.02-116-45 R0

TEST DATE

05/06/24

ISSUE DATE

05/07/24

REVISION DATE

07/09/24

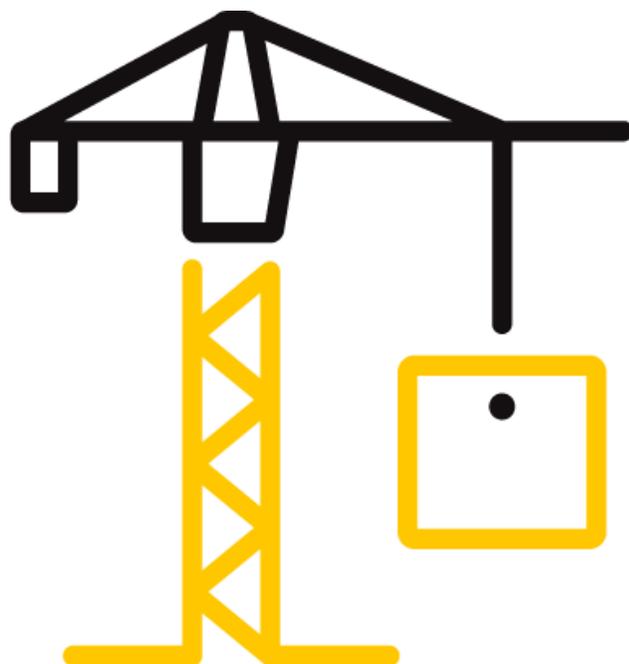
PAGES

74

DOCUMENT CONTROL NUMBER

RT-R-AMER-Test-4044 (04/11/22)

©2017 INTERTEK



TEST REPORT FOR ALUTECH SYSTEMS S.R.O.

Report No: R2648.02-116-45 R0

Date: 07/09/24

SECTION 6

SIMULATION RESULTS

TOTAL PRODUCT CALCULATIONS (SL130 Sliding Door)												
Option Number	Pane Thickness 1 (in)	Gap Width 1 (in)	Pane Thickness 2 (in)	Gap Width 2 (in)	Pane Thickness 3 (in)	Gap Width 3 (in)	Pane Thickness 4 (in)	Gap Fill	Low-e (Surface #)	Tint	Spacer	Grid Type
	U-Factor (Btu/Hr-Ft ² -F)			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)				Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance (CR)		
1	SB60 / ARG90 / CLR (6MM/6MM) - 26MM IG											
	0.223	0.551	0.223					ARG90	0.035(#2)	CL	TS-D	N,S
	U-Factor 0.35			SHGC(N/<1) 0.32 / 0.28				VT(N/<1) 0.56 / 0.49		CR 49		
2	SB60 / ARG90 / CLR (6MM/6MM) - 26MM IG											
	0.223	0.551	0.223					ARG90	0.035(#2)	CL	TS-D	S
	U-Factor 0.39			SHGC(<1) 0.28				VT(<1) 0.49		CR 49		
3	SB70 XL / ARG90 / CLR (6MM/6MM) - 26MM IG											
	0.223	0.551	0.223					ARG90	0.018(#2)	CL	TS-D	N,S
	U-Factor 0.35			SHGC(N/<1) 0.22 / 0.20				VT(N/<1) 0.52 / 0.45		CR 49		
4	SB70 XL / ARG90 / CLR (6MM/6MM) - 26MM IG											
	0.223	0.551	0.223					ARG90	0.018(#2)	CL	TS-D	S
	U-Factor 0.39			SHGC(<1) 0.20				VT(<1) 0.45		CR 49		
5	STOPRAY VISION 60T / ARG95 / CLEARLITE (6MM/6MM) - 28MM IG											
	0.230	0.630	0.230					ARG95	0.025(#2)	CL	TS-D	N,S
	U-Factor 0.35			SHGC(N/<1) 0.29 / 0.25				VT(N/<1) 0.48 / 0.42		CR 49		
6	STOPRAY VISION 60T / ARG95 / CLEARLITE (6MM/6MM) - 28MM IG											
	0.230	0.630	0.230					ARG95	0.025(#2)	CL	TS-D	S
	U-Factor 0.37			SHGC(<1) 0.25				VT(<1) 0.42		CR 49		
7	COMBI NEUTRAL 70/35 / ARG90 / CLEARLITE (6MM/6MM) - 26MM IG											
	0.228	0.551	0.230					ARG90	0.031(#2)	CL	TS-D	N,S
	U-Factor 0.35			SHGC(N/<1) 0.28 / 0.25				VT(N/<1) 0.56 / 0.49		CR 49		
8	COMBI NEUTRAL 70/35 / ARG90 / CLEARLITE (6MM/6MM) - 26MM IG											
	0.228	0.551	0.230					ARG90	0.031(#2)	CL	TS-D	S
	U-Factor 0.39			SHGC(<1) 0.25				VT(<1) 0.49		CR 49		
9	COMBI NEUTRAL 70/35 / ARG95 / CLEARLITE (6MM/6MM) - 28MM IG											
	0.228	0.630	0.230					ARG95	0.031(#2)	CL	TS-D	N,S
	U-Factor 0.35			SHGC(N/<1) 0.28 / 0.25				VT(N/<1) 0.56 / 0.49		CR 49		
10	COMBI NEUTRAL 70/35 / ARG95 / CLEARLITE (6MM/6MM) - 28MM IG											
	0.228	0.630	0.230					ARG95	0.031(#2)	CL	TS-D	S
	U-Factor 0.37			SHGC(<1) 0.25				VT(<1) 0.49		CR 49		

TEST REPORT FOR ALUTECH SYSTEMS S.R.O.

Report No: R2648.02-116-45 RO

Date: 07/09/24

SECTION 6 (Continued)

SIMULATION RESULTS

TOTAL PRODUCT CALCULATIONS (SL130 Sliding Door)												
Option Number	Pane Thickness 1 (in)	Gap Width 1 (in)	Pane Thickness 2 (in)	Gap Width 2 (in)	Pane Thickness 3 (in)	Gap Width 3 (in)	Pane Thickness 4 (in)	Gap Fill	Low-e (Surface #)	Tint	Spacer	Grid Type
	U-Factor (Btu/Hr-Ft ² -F)			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)				Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance (CR)		
11	COMBI NEUTRAL 70/35 / ARG90 / STRATOBEL 44.2 (6MM/8.5MM) - 28.5MM IG											
	0.228	0.551	0.333					ARG90	0.031(#2)	CL	TS-D	N,S
	U-Factor 0.35			SHGC(N/<1) 0.28 / 0.25				VT(N/<1) 0.55 / 0.48		CR 49		
12	COMBI NEUTRAL 70/35 / ARG90 / STRATOBEL 44.2 (6MM/8.5MM) - 28.5MM IG											
	0.228	0.551	0.333					ARG90	0.031(#2)	CL	TS-D	S
	U-Factor 0.39			SHGC(<1) 0.25				VT(<1) 0.48		CR 49		
13	SN 70/35 HT / ARG90 / EXTRA CLR (6MM/6MM) - 26MM IG											
	0.230	0.551	0.230					ARG90	0.025(#2)	CL	TS-D	N,S
	U-Factor 0.35			SHGC(N/<1) 0.26 / 0.24				VT(N/<1) 0.55 / 0.48		CR 49		
14	SN 70/35 HT / ARG90 / EXTRA CLR (6MM/6MM) - 26MM IG											
	0.230	0.551	0.230					ARG90	0.025(#2)	CL	TS-D	S
	U-Factor 0.39			SHGC(<1) 0.24				VT(<1) 0.48		CR 49		
15	COOL-LITE XTREME 70-33 II / ARG90 / PLANICLEAR (6MM/6MM) - 26MM IG											
	0.236	0.551	0.236					ARG90	0.018(#2)	CL	TS-D	N,S
	U-Factor 0.35			SHGC(N/<1) 0.24 / 0.21				VT(N/<1) 0.56 / 0.49		CR 49		
16	COOL-LITE XTREME 70-33 II / ARG90 / PLANICLEAR (6MM/6MM) - 26MM IG											
	0.236	0.551	0.236					ARG90	0.018(#2)	CL	TS-D	S
	U-Factor 0.39			SHGC(<1) 0.21				VT(<1) 0.49		CR 49		
17	COOL-LITE SKN 176 II / ARG90 / PLANICLEAR (6MM/6MM) - 26MM IG											
	0.236	0.551	0.236					ARG90	0.016(#2)	CL	TS-D	N,S
	U-Factor 0.35			SHGC(N/<1) 0.27 / 0.24				VT(N/<1) 0.56 / 0.49		CR 49		
18	COOL-LITE SKN 176 II / ARG90 / PLANICLEAR (6MM/6MM) - 26MM IG											
	0.236	0.551	0.236					ARG90	0.016(#2)	CL	TS-D	S
	U-Factor 0.38			SHGC(<1) 0.24				VT(<1) 0.49		CR 49		
19	COOL-LITE ST 120 / ARG90 / PLANITHERM XN II (6MM/6MM) - 26MM IG											
	0.236	0.551	0.236					ARG90	0.680(#2) / 0.051(#3)	CL	TS-D	N,S
	U-Factor 0.36			SHGC(N/<1) 0.15 / 0.14				VT(N/<1) 0.15 / 0.13		CR 49		
20	COOL-LITE ST 120 / ARG90 / PLANITHERM XN II (6MM/6MM) - 26MM IG											
	0.236	0.551	0.236					ARG90	0.680(#2) / 0.051(#3)	CL	TS-D	S
	U-Factor 0.39			SHGC(<1) 0.14				VT(<1) 0.13		CR 49		

TEST REPORT FOR ALUTECH SYSTEMS S.R.O.

Report No: R2648.02-116-45 R0

Date: 07/09/24

SECTION 6 (Continued)

SIMULATION RESULTS

TOTAL PRODUCT CALCULATIONS (SL130 Sliding Door)												
Option Number	Pane Thickness 1 (in)	Gap Width 1 (in)	Pane Thickness 2 (in)	Gap Width 2 (in)	Pane Thickness 3 (in)	Gap Width 3 (in)	Pane Thickness 4 (in)	Gap Fill	Low-e (Surface #)	Tint	Spacer	Grid Type
	U-Factor (Btu/Hr-Ft2-F)			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)				Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance (CR)		
21	COOL-LITE ST 136 / ARG90 / PLANITHERM XN II (6MM/6MM) - 26MM IG											
	0.236	0.551	0.236					ARG90	0.770(#2) / 0.051(#3)	CL	TS-D	N,S
	U-Factor 0.36			SHGC(N/<1) 0.23 / 0.20				VT(N/<1) 0.26 / 0.23		CR 49		
22	COOL-LITE ST 136 / ARG90 / PLANITHERM XN II (6MM/6MM) - 26MM IG											
	0.236	0.551	0.236					ARG90	0.770(#2) / 0.051(#3)	CL	TS-D	S
	U-Factor 0.39			SHGC(<1) 0.20				VT(<1) 0.23		CR 49		
23	SUNCOOL 70/35 PRO T / ARG90 / K GLASS (6MM/6MM) - 26MM IG											
	0.230	0.551	0.232					ARG90	0.021(#2) / 0.173(#4)	CL	TS-D	N,S
	U-Factor 0.31			SHGC(N/<1) 0.28 / 0.25				VT(N/<1) 0.52 / 0.45		CR 44		
24	SUNCOOL 70/35 PRO T / ARG90 / K GLASS (6MM/6MM) - 26MM IG											
	0.230	0.551	0.232					ARG90	0.021(#2) / 0.173(#4)	CL	TS-D	S
	U-Factor 0.34			SHGC(<1) 0.25				VT(<1) 0.45		CR 44		
25	COMBI NEUTRAL 70/35 / ARG90 / PLANIBEL G FAS T (6MM/6MM) - 26MM IG											
	0.228	0.551	0.230					ARG90	0.031(#2) / 0.175(#4)	CL	TS-D	N,S
	U-Factor 0.31			SHGC(N/<1) 0.27 / 0.24				VT(N/<1) 0.51 / 0.45		CR 44		
26	COMBI NEUTRAL 70/35 / ARG90 / PLANIBEL G FAS T (6MM/6MM) - 26MM IG											
	0.228	0.551	0.230					ARG90	0.031(#2) / 0.175(#4)	CL	TS-D	S
	U-Factor 0.34			SHGC(<1) 0.24				VT(<1) 0.45		CR 44		
27	SN 70/37 HT / ARG90 / EXTRA CLR / ARG90 / CG PREMIUM 2T (6MM/6MM/6MM) - 42MM IG											
	0.230	0.472	0.230	0.472	0.230			ARG90	0.022(#2) / 0.041(#5)	CL	TS-D	N,S
	U-Factor 0.25			SHGC(N/<1) 0.26 / 0.23				VT(N/<1) 0.50 / 0.44		CR 48		
28	SN 70/37 HT / ARG90 / EXTRA CLR / ARG90 / CG PREMIUM 2T (6MM/6MM/6MM) - 42MM IG											
	0.230	0.472	0.230	0.472	0.230			ARG90	0.022(#2) / 0.041(#5)	CL	TS-D	S
	U-Factor 0.27			SHGC(<1) 0.23				VT(<1) 0.44		CR 48		
29	COMBI NEUTRAL 70/35 / ARG90 / CLEARLITE / ARG90 / STRATOPHONE IPLUS I-TOP 44.2 (6MM/6MM/8.5MM) - 40.5MM IG											
	0.228	0.391	0.230	0.391	0.333			ARG90	0.031(#2) / 0.038(#5)	CL	TS-D	N,S
	U-Factor 0.26			SHGC(N/<1) 0.25 / 0.23				VT(N/<1) 0.48 / 0.42		CR 48		
30	COMBI NEUTRAL 70/35 / ARG90 / CLEARLITE / ARG90 / STRATOPHONE IPLUS I-TOP 44.2 (6MM/6MM/8.5MM) - 40.5MM IG											
	0.228	0.391	0.230	0.391	0.333			ARG90	0.031(#2) / 0.038(#5)	CL	TS-D	S
	U-Factor 0.28			SHGC(<1) 0.23				VT(<1) 0.42		CR 48		

TEST REPORT FOR ALUTECH SYSTEMS S.R.O.

Report No: R2648.02-116-45 RO

Date: 07/09/24

SECTION 6 (Continued)

SIMULATION RESULTS

TOTAL PRODUCT CALCULATIONS (SL130 Sliding Door)												
Option Number	Pane Thickness 1 (in)	Gap Width 1 (in)	Pane Thickness 2 (in)	Gap Width 2 (in)	Pane Thickness 3 (in)	Gap Width 3 (in)	Pane Thickness 4 (in)	Gap Fill	Low-e (Surface #)	Tint	Spacer	Grid Type
	U-Factor (Btu/Hr-Ft2-F)		Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)				Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance (CR)			
31	COMBI NEUTRAL 70/35 / ARG90 / CLEARLITE / ARG90 / STRATOPHONE IPLUS I-TOP 44.2 (6MM/4MM/8.5MM) - 40.5MM IG											
	0.228	0.472	0.152	0.391	0.333			ARG90	0.031(#2) / 0.038(#5)	CL	TS-D	N,S
	U-Factor 0.26		SHGC(N/<1) 0.25 / 0.23				VT(N/<1) 0.48 / 0.42		CR 48			
32	COMBI NEUTRAL 70/35 / ARG90 / CLEARLITE / ARG90 / STRATOPHONE IPLUS I-TOP 44.2 (6MM/4MM/8.5MM) - 40.5MM IG											
	0.228	0.472	0.152	0.391	0.333			ARG90	0.031(#2) / 0.038(#5)	CL	TS-D	S
	U-Factor 0.28		SHGC(<1) 0.23				VT(<1) 0.42		CR 48			
33	COOL-LITE SKN 176 II ARG90 / PLANICLEAR / ARG90 / PLANITHERM XN II (6MM/6MM/6MM) - 42MM IG											
	0.236	0.472	0.236	0.472	0.236			ARG90	0.016(#2) / 0.051(#5)	CL	TS-D	N,S
	U-Factor 0.25		SHGC(N/<1) 0.25 / 0.22				VT(N/<1) 0.50 / 0.43		CR 48			
34	COOL-LITE SKN 176 II ARG90 / PLANICLEAR / ARG90 / PLANITHERM XN II (6MM/6MM/6MM) - 42MM IG											
	0.236	0.472	0.236	0.472	0.236			ARG90	0.016(#2) / 0.051(#5)	CL	TS-D	S
	U-Factor 0.27		SHGC(<1) 0.22				VT(<1) 0.43		CR 48			
35	SUNCOOL 70/35 PRO T / ARG90 / PLANIBEL CLEARLITE / ARG90 / K GLASS (6MM/6MM/6MM) - 42MM IG											
	0.230	0.472	0.230	0.472	0.232			ARG90	0.021(#2) / 0.173(#5)	CL	TS-D	N,S
	U-Factor 0.26		SHGC(N/<1) 0.26 / 0.23				VT(N/<1) 0.47 / 0.41		CR 48			
36	SUNCOOL 70/35 PRO T / ARG90 / PLANIBEL CLEARLITE / ARG90 / K GLASS (6MM/6MM/6MM) - 42MM IG											
	0.230	0.472	0.230	0.472	0.232			ARG90	0.021(#2) / 0.173(#5)	CL	TS-D	S
	U-Factor 0.29		SHGC(<1) 0.23				VT(<1) 0.41		CR 48			
37	SUNCOOL 66/33 PRO T / ARG90 / PLANIBEL CLEARLITE (6MM/6MM) - 26MM IG											
	0.233	0.472	0.233					ARG90	0.025(#2) / 0.025(#4)	CL	TS-D	N,S
	U-Factor 0.35		SHGC(N/<1) 0.28 / 0.25				VT(N/<1) 0.54 / 0.47		CR 49			
38	SUNCOOL 66/33 PRO T / ARG90 / PLANIBEL CLEARLITE (6MM/6MM) - 26MM IG											
	0.233	0.472	0.233					ARG90	0.025(#2) / 0.025(#4)	CL	TS-D	S
	U-Factor 0.39		SHGC(<1) 0.25				VT(<1) 0.47		CR 49			
39	CS73 / ARG90 / CS73 (5MM/5MM) - 26MM IG											
	0.185	0.630	0.185					ARG90	0.148(#2) / 0.148(#4)	CL	TS-D	N,S
	U-Factor 0.33		SHGC(N/<1) 0.48 / 0.43				VT(N/<1) 0.55 / 0.48		CR 42			
40	CS73 / ARG90 / CS73 (5MM/5MM) - 26MM IG											
	0.185	0.630	0.185					ARG90	0.148(#2) / 0.148(#4)	CL	TS-D	S
	U-Factor 0.35		SHGC(<1) 0.43				VT(<1) 0.48		CR 42			

TEST REPORT FOR ALUTECH SYSTEMS S.R.O.

Report No: R2648.02-116-45 R0

Date: 07/09/24

SECTION 6 (Continued)

SIMULATION RESULTS

TOTAL PRODUCT CALCULATIONS (SL130 Sliding Door)												
Option Number	Pane Thickness 1 (in)	Gap Width 1 (in)	Pane Thickness 2 (in)	Gap Width 2 (in)	Pane Thickness 3 (in)	Gap Width 3 (in)	Pane Thickness 4 (in)	Gap Fill	Low-e (Surface #)	Tint	Spacer	Grid Type
	U-Factor (Btu/Hr-Ft ² -F)		Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)				Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance (CR)			
41	COMBI NEUTRAL 70/35 / ARG90 / CLEARLITE / ARG90 / PLANIBEL CLEARLITE (6MM/4MM/6MM) - 42MM IG											
	0.228	0.472	0.152	0.551	0.230			ARG90	0.031(#2)	CL	TS-D	N,S
	U-Factor 0.29		SHGC(N/<1) 0.26 / 0.23				VT(N/<1) 0.51 / 0.44		CR 48			
42	COMBI NEUTRAL 70/35 / ARG90 / CLEARLITE / ARG90 / PLANIBEL CLEARLITE (6MM/4MM/6MM) - 42MM IG											
	0.228	0.472	0.152	0.551	0.230			ARG90	0.031(#2)	CL	TS-D	S
	U-Factor 0.33		SHGC(<1) 0.23				VT(<1) 0.44		CR 48			